

**IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF MASSACHUSETTS**

AMAZIN' RAISINS INTERNATIONAL, INC.,

Plaintiff,

v.

OCEAN SPRAY CRANBERRIES, INC.,

Defendant.

Civil Action No. 1:04-cv-12679-MLW

JOINT MEMORANDUM CONCERNING TUTORIAL ON THE ACCUSED PROCESS

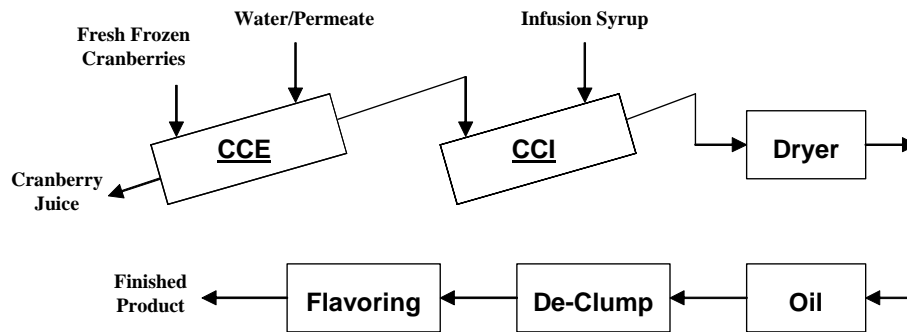
The parties, Ocean Spray Cranberries, Inc. ("Ocean Spray") and Amazin' Raisins International, Inc. ("ARI") hereby jointly submit the following memorandum pursuant to the Court's Order dated March 2, 2006, which requested a tutorial on the allegedly infringing manufacturing process.

This is a patent infringement case concerning methods for manufacturing flavored dried fruit products. ARI contends that some of Ocean Spray's sweetened dried cranberry products and the method of manufacturing those products infringes its patent. Ocean Spray makes the accused products at manufacturing facilities in Tomah, Wisconsin and Middleboro, Massachusetts. The manufacturing processes at these two facilities are essentially the same. Though there are a few differences, they are immaterial to the litigation.

The parties jointly submit the following summary of the relevant portions of Ocean Spray's manufacturing process. Certain components of the process are not described for lack of relevance and in the interest of simplicity. Moreover, Ocean Spray considers some of these additional steps highly confidential. At the hearing scheduled for April 18, 2006, the parties will

bring product samples, video clips, photos, and additional demonstrative materials to further explain the accused process.

Ocean Spray is an agricultural cooperative owned by its cranberry and grapefruit growers. Each autumn, Ocean Spray collects enormous volumes of cranberries (approximately 5 billion pounds in 2005) and freezes most of them for manufacture and use throughout the year. The following chart provides a visual overview of the general steps of Ocean Spray's manufacturing process:



Ocean Spray's manufacturing process begins with large crates of frozen cranberries, as illustrated below:



These frozen cranberries are cleaned and sorted to roughly uniform size. Next, the frozen cranberries are sliced and defrosted in hot cranberry juice using equipment shown below.



The sliced, defrosted cranberries are then discharged into a long piece of equipment known as a counter current extractor (CCE). A top view of the CCE is shown below.



The CCE rests on an incline. Cranberries enter the bottom of the CCE and are slowly eased up the unit by the reciprocating motion of a large auger shown in the photo above. At the same time pure water or permeate¹ enters the top of the CCE, as shown below.



This extraction process is used to remove juice from the cranberries, which juice is thereafter used to make Ocean Spray's cranberry juice products. As the fruit travels up the length the CCE, the water or permeate flows down through it. The water essentially washes most of the soluble fruit solids (e.g. acids, sugars, and other cranberry flavor components), out of the fruit. This is primarily accomplished by a process called osmosis.

During osmosis, soluble material (e.g. as sugars and acids) flow from a region of greater concentration to a region of lesser concentration in an effort to achieve equilibrium. Since the cranberries have a higher concentration of sugars, acids, and other soluble fruit solids than the water flowing through them, these fruit components migrate out of the cranberries, while pure water migrates in. This is known as osmotic exchange. Thus, by the time the fruit reaches the

¹ Ocean Spray's manufacturing plants are limited in the amount of waste water they can expel. Consequently, in addition to well water, Ocean Spray occasionally uses permeate in the extraction process. Permeate is a water byproduct created when the extracted cranberry juice is concentrated by a reverse osmosis system. It is essentially water, with a few impurities, because reverse osmosis is an imperfect process.

top of the CCE, it has little remaining acids, sugars, and other soluble fruit solids. Ocean Spray refers to this interim product as “decharacterized fruit.” Ocean Spray contends that its decharacterized fruit pieces have little or no perceptible flavor. Amazin’ Raisins contends that the decharacterized fruit pieces retain their cranberry flavor. While decharacterized fruit emerges from the top of the CCE, a liquid containing the soluble fruit solids² that have been extracted from the cranberries exits at the bottom. The high quality, valuable cranberry juice solids are collected and concentrated for later use or sale.

The moisture content of the defrosted cranberries entering the CCE is approximately 87%. Ocean Spray contends that the moisture content of the decharacterized fruit pieces is the same or slightly higher than the moisture content of the sliced cranberries fed into the CCE, as the pieces are soaked in water during the entire CCE process. Amazin’ Raisins contends that the moisture content of the decharacterized fruit pieces has not been measured by any party, and thus cannot be stated without resort to speculation. A picture of the decharacterized fruit exiting the CCE is shown below:



² “Soluble fruit solids” refers to the sugars, acids and other water soluble materials (e.g. anthocyanins) that are contained within the matrix of the frozen fruit.

The goal of the CCE process is to extract the maximum amount of juice possible from the cranberries for use in Ocean Spray's cranberry juice products. Ocean Spray analyzes the sugar and acid content of the decharacterized fruit pieces as part of its manufacturing process, and contends that CCE process reduces the sugar content of the cranberry pieces by approximately 94% and the acid content is reduced by approximately 90%. Ocean Spray contends that the residual amounts of acid and sugar remain in the fruit pieces throughout the remainder of the process and are present in the final product.

After the CCE process, the decharacterized fruit enters the counter current infuser (CCI). Like the CCE, the CCI is a long, inclined piece of equipment that slowly eases the fruit up the unit. However, in the CCI, an infusion syrup, rather than water enters at the top and flows through the fruit. An example of this syrup is illustrated below.



Most of the infusion syrups contain sugar, a coloring agent, and citric acid. For its blueberry-flavored products, Ocean Spray's infusion syrup is blueberry concentrate. The parties dispute the purpose and result of the use of citric acid in the infusion syrup. Ocean Spray contends that the citric acid serves to mimic the tartness of a cranberry, which is expected by consumers of cranberry products. Amazin' Raisins believes the citric acid serves to render the residual cranberry flavor of the decharacterized fruit pieces imperceptible or unrecognizable. Ocean

Spray carefully monitors the acid level of the fruit exiting the CCE, and tightly controls the acid level of the infusion syrup to ensure that total acid level of the sweetened dried product remains within the specified range.

Exiting the CCI, the infused fruit carries with it a substantial amount of thick, sticky syrup. The fruit pieces are sticky because of the sugar content of the infusion syrup. If the infusion syrup did not contain sweetener, the fruit pieces would not be sticky, and would be inedible. This fruit is then washed and/or shaken in attempt to remove some of this excess syrup. Next, it is conveyed along moving belts through multiple stages of a long, hot dryer. The fruit moves slowly through the dryer as it dries. The moisture content of the infused fruit entering the dryer is between 46% and 60%. Exiting the dryer, the moisture content for the accused products is less than 18%. As the dried fruit pieces exit the dryer, Ocean Spray contends that the pieces are very sticky and are mostly in clumps like that shown in the photo below.



Amazin' Raisins contends that only some of the fruit pieces emerge from the dryer in clumps.

To prevent the fruit from adhering to the surface of the equipment, oil is applied both to the equipment and fruit pieces as the fruit pieces are discharged from the dryer. The dried fruit pieces are then passed through an oiling drum that applies additional oil to the surface of the pieces to break up clumps and reduce their stickiness.

After oiling, some of the fruit pieces are still bound in clumps. Accordingly, a de-clumping mechanism is used to separate and “de-clump” the fruit pieces, as shown in the photograph below. Even after these steps, Ocean Spray contends that the fruit pieces continue to bind and must be manually removed by technicians who continually monitor the production line.



After passing through the oiling drum, declumping machine, and visual inspection, the final dried fruit product appears as depicted below:



Lastly, a topical flavor is applied to the outer surface of the fruit pieces on some of Ocean Spray's products. The fruit is then sealed and packaged.

The parties will welcome questions about the process at the April 18th hearing.

Respectfully submitted this 11th day of April, 2006.

s/ William R. Woodford

William R. Woodford (pro hac vice)
FISH & RICHARDSON P.C.
3300 Dain Rauscher Plaza
60 South Sixth Street
Minneapolis, MN 55402
(612) 335-5070 Telephone
(612)288-9696 Facsimile

Michael E. Zeliger (BBO #633654)
KIRKPATRICK & LOCKHART
NICHOLSON GRAHAM LLP
State Street Financial Center
1 Lincoln Street
Boston, MA 02111-2950
Direct: (617) 951-9153
Facsimile: (617) 261-3175

Attorneys for Defendant

s/ Todd S. Werner

Douglas J. Williams (MN # 117353)
Christopher J. Sorenson (MN # 210118)
Todd S. Werner (MN # 033019X)
MERCHANT & GOULD P.C.
3200 IDS Center
80 South Eighth Street
Minneapolis, MN 55402
Telephone: 612-332-5300
Facsimile: 612-332-9081

Nicholas G. Papastavros (BBO # 635742)
Gina M. McCreadie (BBO # 661107)
NIXON PEABODY LLP
100 Summer Street
Boston, MA 02110
Telephone: 617-345-1000

Attorneys for Plaintiff